

CHAPTER 6

BARRIERS AND OPENINGS

0600. THE PURPOSE OF PHYSICAL BARRIERS. Physical barriers control, deny, impede, delay and discourage access by unauthorized persons. They accomplish this by:

- a. Defining the perimeter of restricted areas.
- b. Establishing a physical and psychological deterrent to entry, as well as providing legal notice that entry is not permitted.
- c. Optimizing use of security forces, by separating the innocent from the suspicious.
- d. Enhancing detection and apprehension opportunities.
- e. Channeling the flow of personnel and vehicles through designated portals in a manner which permits efficient operation of the personnel movement and control system.

0601. TYPES OF BARRIERS. Major types of physical barriers are:

- a. Natural - mountains, swamps, thick vegetation, rivers, bays, cliffs, etc.
- b. Structural - fences, walls, doors, gates, roadblocks, vehicle barriers, etc.

0602. GENERAL CONSIDERATIONS. Physical barriers delay, but cannot be depended upon alone to stop a determined intruder. Therefore, to be effective, such barriers must be augmented by security force personnel or other means of protection and assessment. In determining the type of barrier required, the following will be considered:

- a. Physical barriers will be established along the designated perimeter of all restricted areas. The barrier or combination of barriers used must afford a minimally acceptable equal degree of continuous protection along the entire perimeter of the restricted area.
- b. In establishing any perimeter barrier, consideration must be given to providing emergency entrances and exits in case of fire. However, openings will be kept to a minimum consistent with the efficient and safe operation of the facility, to minimize the degree of resources required for security.

0603. FENCES

a. Federal standards and specifications for chain link fencing, gates, and accessories are outlined in references (u) through (y). To economize the use of security force personnel and increase detection by all parties in the area of any suspicious activity, mesh openings will not normally be covered, blocked, or laced with material which would prevent a clear view of personnel, vehicles, or material in the outer or inner vicinity of the fence line.

(1) Measures will be taken to prevent the effective height of the fence from being lowered by pulling down on the top of the fence fabric. Similarly, measures will be taken to prevent enough room being made to surreptitiously crawl under the fence by pulling up on the bottom of the fence fabric.

(2) The bottom of the fence fabric must be close enough to firm soil or buried sufficiently to prevent surreptitious entry under the fence.

(3) Culverts under or through a fence shall be secured to prevent their use for surreptitious entry.

(4) No fence will be located so that the features of the land (its topography) or structures (buildings, utility tunnels, light and telephone poles, fire escapes, trees, vines, ladders, etc.) aid passage over, around, or under the fence, without taking of compensatory measures. These measures will be documented in the physical security plan.

0604. WALLS. Walls may be used as barriers in lieu of fences. The protection afforded by walls shall be equivalent to that provided by chain link fencing. Walls, floors, and roofs of buildings may also serve as perimeter barriers.

0605. TEMPORARY BARRIERS. In some instances, the temporary nature of a restricted area does not justify the construction of permanent perimeter barriers. This will be compensated for by additional security forces, patrols and other temporary security measures during the period the restricted area is established.

0606. CLEAR ZONES

a. Where fences are used as restricted area perimeter barriers, an unobstructed area or clear zone should be maintained on both sides of the restricted area fence. Similarly, where exterior walls of buildings form part of restricted area barriers, an unobstructed area or clear zone should be maintained on the exterior side of the building wall. The purpose of such areas is defeated if vegetation is high enough to provide concealment of a person lying prone on the ground. Vegetation or topographical features which must be retained in clear zones for

erosion control or for legal reasons shall be trimmed or pruned to eliminate concealment or be checked by security patrols at irregular intervals.

b. An inside clear zone should be at least 30 feet. Where possible, a larger clear zone should be provided to preclude or minimize damage from incendiaries or bombs.

c. The outside clear zone should be 20 feet or greater between the perimeter barrier and any exterior structures, vegetation or any obstruction to visibility.

d. Obstacles which are within exterior and interior clear zones and represent no aid to circumvention of the perimeter barrier or do not provide concealment (nor provide a plausible reason to appear innocently loitering) to an intruder do not violate the clear zones considerations.

e. In those activities where space on government land is available, but the fence does not meet clear zone guidelines in its present location, relocating the fence to obtain a clear zone may not be feasible or cost effective. Some alternatives to extending the clear zone would be increasing the height of the perimeter fence, extending outriggers, installing double outriggers, etc., to compensate for the close proximity of aids to concealment or access. All fencing should be kept clear of visual obstructions such as vines, shrubs, tree limbs, etc., which could provide concealment for an intruder.

f. Inspections of clear zones should be incorporated with inspections of perimeter barriers to ensure an unrestricted view of the barrier and adjacent ground.

0607. INSPECTION OF BARRIERS. Security force personnel should check restricted area perimeter barriers at least weekly for defects that would facilitate unauthorized entry and report such defects to supervisory personnel. Personnel must be alert to the following:

- a. Damaged areas.
- b. Deterioration.
- c. Erosion of soil (intent here applies mostly to instances where a fence is used as the perimeter barrier).
- d. Growth in the clear zones that would afford cover for possible intruders, and concurrently hinder effectiveness of any protective lighting, assessment systems, etc. If not removed, the growth described here and the obstructions described in the paragraph below could result in requiring more manpower to patrol the affected areas than would be the case if there were no such growth or obstructions.

e. Obstructions which would afford concealment or aid entry/exit for an intruder, or provide a plausible excuse to openly loiter without need for hiding (e.g., a bus stop next to the fence line).

f. Signs of illegal or improper intrusion or attempted intrusion.

0608. RESTRICTED AREA PERIMETER OPENINGS. Openings in the perimeter barrier will be kept to the minimum necessary for the safe and efficient operation of the activity. Access through such openings must either be controlled, or the openings must be secured against surreptitious entry, or other compensatory measures taken as a minimum. If the perimeter barrier is designed to protect against forced entry, then any openings in the barrier must afford protection against forced entry or other compensatory measures taken. These openings will be frequently inspected by security patrols.

0609. VEHICLE BARRIERS. The use of vehicle barriers such as crash barriers, obstacles or reinforcement systems for chain link gates at uncontrolled avenues of approach can impede or prevent unauthorized vehicle access (references (z) and (aa) pertain). For new construction at outside continental United States facilities, review reference (z) for appropriate stand-off distances. An interim buffer of at least 400 feet is recommended for high occupancy facilities.